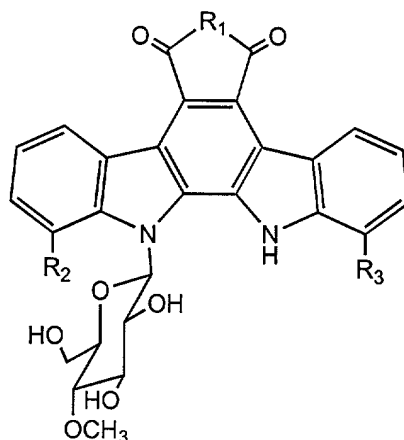


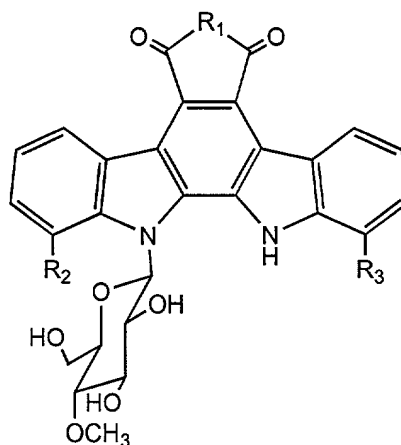
What is claimed is:

1. A method for enhancing the radiosensitivity of a neoplastic cell comprising contacting the neoplastic cell with a radiosensitivity increasing amount of indolocarbazole derivative having the following structure A



wherein R_1 is not NCH_3 and wherein R_2 and R_3 are not H when R_1 is NH.

2. The method of claim 1, wherein R_1 is NH, O, or NOH.
3. The method of claim 1, wherein R_2 and R_3 are Cl or H.
4. The method of claim 1, wherein the amount of indolocarbazole derivative is at a non-cytotoxic level.
5. A method for enhancing the radiosensitivity of a neoplastic cell comprising contacting the neoplastic cell with a radiosensitivity increasing amount of a composition comprising an indolocarbazole derivative having the following structure A

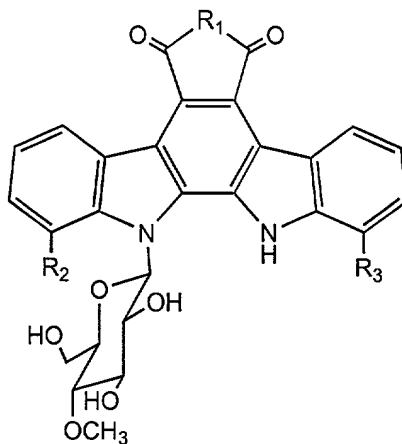


wherein R_1 is not NCH_3 and wherein R_2 and R_3 are not H when R_1 is NH.

- 5 6. The method of claim 5, wherein R_1 is NH, O, or NOH.
7. The method of claim 5, wherein R_2 and R_3 are Cl or H.
8. The method of claim 5, wherein the composition further comprises a
- 10 pharmaceutically acceptable carrier.
9. The method of claim 5, wherein the amount of composition is at a non-
- cytotoxic level.
- 15 10. The method of claim 1, wherein the neoplastic cell is solid tumor cell or
- cancer cell.
11. The method of claim 1, wherein the neoplastic cell is selected from the group
- consisting of prostate cancer cell, bone cancer cell, colon cancer cell,
- 20 lymphoma cancer cell, and brain cancer cell.
12. A method for treating a neoplastic cell comprising

contacting the neoplastic cell with a radiosensitivity increasing

amount of indolocarbazole derivative having the following structure A



5 wherein R₁ is not NCH₃ and wherein R₂ and R₃ are not H when R₁ is NH; and

contacting the neoplastic cell with radiation or radiation in
combination with an anti-neoplastic chemotherapeutic agent.

10 13. The method of claim 12, wherein R₁ is NH, O, or NOH.

14. The method of claim 12, wherein R₂ and R₃ are Cl or H.

15 15. The method of claim 12, wherein the neoplastic cell is contacted with the
indolocarbazole derivative before being contacted with radiation or radiation
in combination with an anti-neoplastic chemotherapeutic agent.

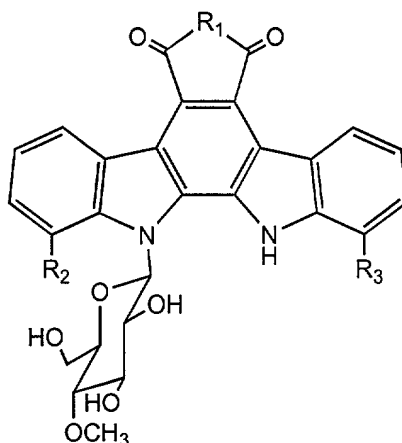
16. The method of claim 12, wherein the amount of indolocarbazole derivative is
at a non-cytotoxic level.

20

17. A method for treating a neoplastic cell comprising

contacting the neoplastic cell with a radiosensitivity increasing
amount of a composition comprising an indolocarbazole derivative having the

following structure A



wherein R_1 is not NCH_3 and wherein R_2 and R_3 are not H when R_1 is NH; and

contacting the neoplastic cell with radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

18. The method of claim 17, wherein R_1 is NH, O, or NOH.

19. The method of claim 17, wherein R_2 and R_3 are Cl or H.

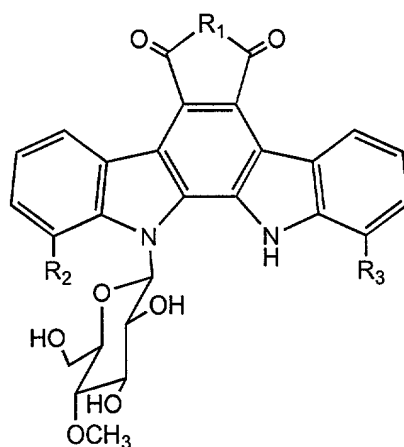
20. The method of claim 17, wherein the composition further comprises a pharmaceutically acceptable carrier.

21. The method of claim 17, wherein the amount of composition is at a non-cytotoxic level.

22. The method of claim 17, wherein the neoplastic cell is contacted with the composition before being contacted with radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

23. A method for treating a neoplastic growth comprising

administering to a subject in need of such treatment a radiosensitivity increasing amount of an indolocarbazole derivative having the following structure A



5

wherein R_1 is not NCH_3 and wherein R_2 and R_3 are not H when R_1 is NH, and radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

10

24. The method of claim 23, wherein R_1 is NH, O, or NOH.

25. The method of claim 23, wherein R_2 and R_3 are Cl or H.

15

26. The method of claim 23, wherein the amount of indolocarbazole derivative is at a non-cytotoxic level.

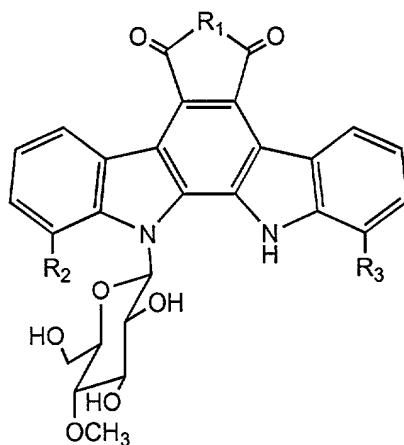
27. The method of claim 23, wherein the indolocarbazole derivative is administered before the radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

20

28. A method for treating a neoplastic growth comprising

administering to a subject in need of such treatment a radiosensitivity

increasing amount of a composition comprising an indolocarbazole derivative having the following structure A



5

wherein R_1 is not NCH_3 and wherein R_2 and R_3 are not H when R_1 is NH, and radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

- 10 29. The method of claim 28, wherein R_1 is NH, O, or NOH.
30. The method of claim 28, wherein R_2 and R_3 are Cl or H.
31. The method of claim 28, wherein the amount of composition is at a non-cytotoxic level.
- 15 32. The method of claim 28, wherein the composition further comprises a pharmaceutically acceptable carrier.
- 20 33. The method of claim 28, wherein the composition is administered before the radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.